



# ***Montana Fish, Wildlife & Parks***

## **Brucellosis Project Update May 2013**

Seropositive elk have been monitored 2-5 times per week throughout the month of May. Monitoring flights have been conducted once per week for the seropositive elk and once per month for the seronegative elk. All seropositive elk have moved onto summer range in the Upper Ruby Valley and Centennial Valley.

Torrey Ritter and pilot Neil Caldwell conducted an elk monitoring flight of all 40 radio-collared elk on May 21, 2013 (Figure 1 & 2). All 40 of the radio-collared elk were located during the flight and all collars were transmitting on live mode. As of May 30, 4 out of the 7 seropositive elk's vaginal implant transmitters (VITs) have been expelled, and 1 VIT presumably malfunctioned and started failing to transmit around April 8.

A VIT was expelled on Forest Service land in the Ruby Valley on May 22<sup>nd</sup> but no calf or fetus was found near the location of the VIT. Subsequent monitoring of the collared female has not indicated the presence of a calf or any unusual behavior that may indicate a calving event. Another VIT was expelled on Forest Service land in the Long Creek area of the Centennial Valley on May 25<sup>th</sup> and a live calf was discovered near the location of the VIT. Samples were taken at the site and the calf was fitted with an ear tag transmitter for future monitoring. The other 2 expelled VITs both came out on May 28<sup>th</sup> on private lands on the south side of the Centennial Valley. One of these VITs was recovered but no calf or fetus was found. However, subsequent monitoring of the behavior of the collared female has provided some evidence that she does have a live calf. We have so far been unable to obtain permission to retrieve the last VIT but will do so as soon as possible. The behavior of the collared female has provided some evidence that she had a live calf, but this cannot yet be confirmed.

The 3 collared females who have expelled their VITs but for whom a calf was not found will continue to be monitored closely to look for evidence of a calf or a birth event. Samples have been collected from all VIT locations and are currently being analyzed by the Department of Livestock Diagnostics Laboratory in Bozeman, MT.

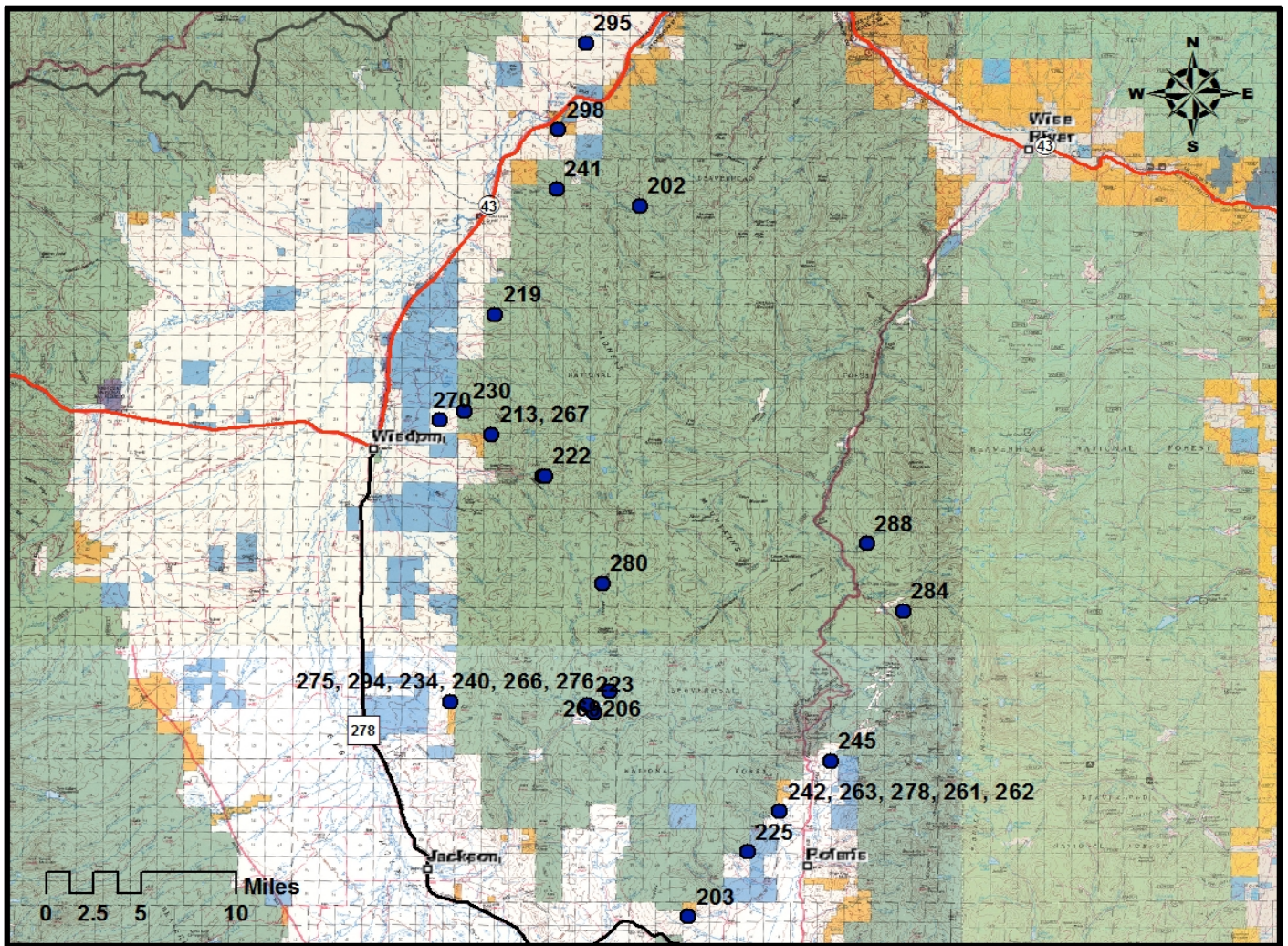


Figure 1. Seronegative elk locations from the May 21, 2013 monitoring flight.

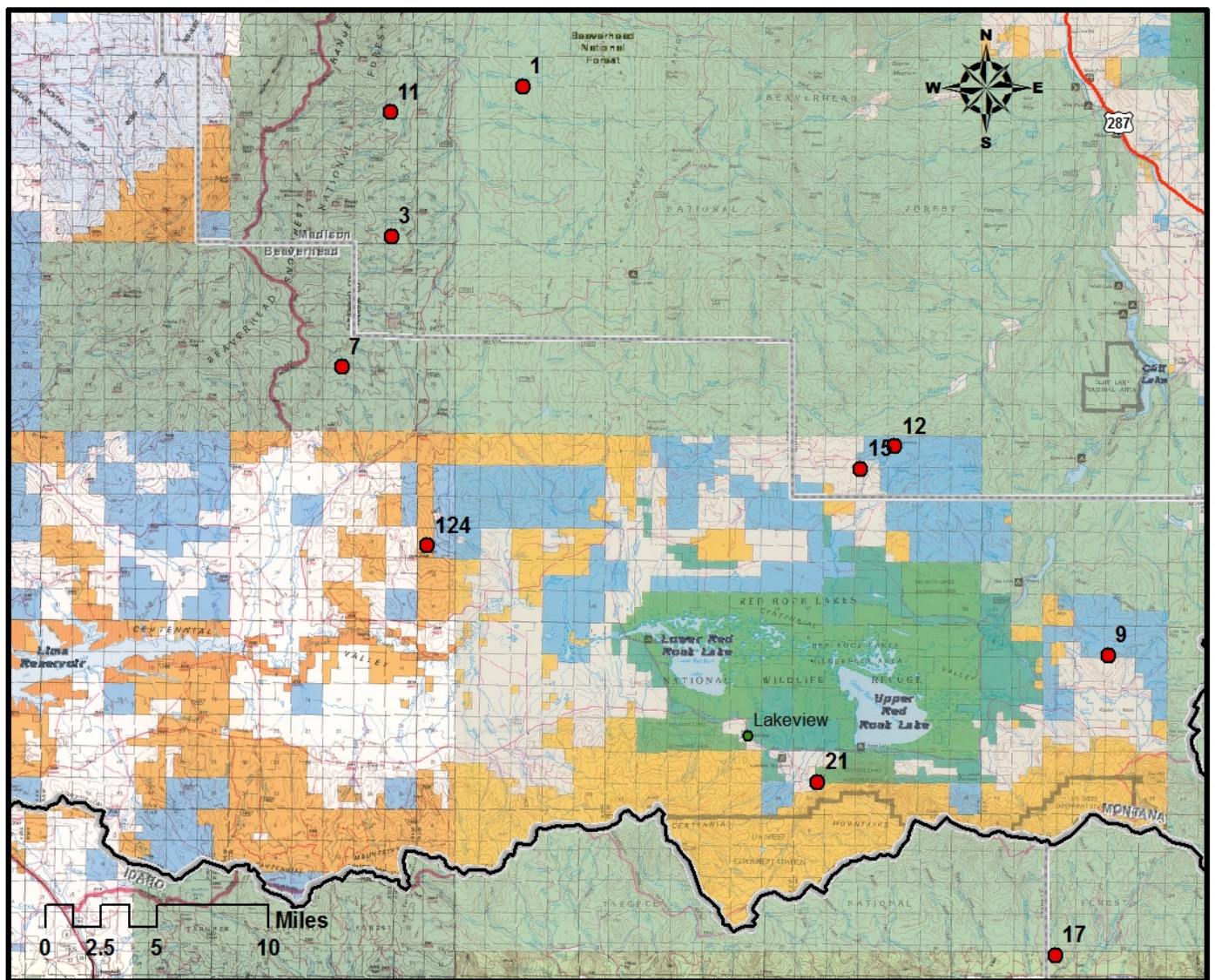


Figure 2. Seropositive elk locations from the May 21, 2013 monitoring flight.

**Table 1. Forty elk are currently radiocollared in the brucellosis study area. Thirty elk were radiocollared in each of the past 3 years and all seropositive elk will remain collared for the duration of the study.**

<b>ID #</b>	<b>Capture Area</b>	<b>First capture year</b>	<b>Serostatus</b>	<b>Pregnancy status (2013)</b>	<b>Most recent location</b>
1	Ruby	2011	Positive	Pregnant	E of Ledford Cr
3	Ruby	2011	Positive	Pregnant	SW of Timber Hill
7	Ruby	2011	Positive	Pregnant	SW of Timber Hill
9	Ruby	2011	Positive	Pregnant	SW of Timber Hill
11	Ruby	2011	Positive	Open	SW of Timber Hill
12	Ruby	2011	Positive	Open	East side 287
15	Little Basin Cr/ Sage	2012	Positive	Pregnant	SW of Timber Hill
17	Little Basin Cr/ Sage	2012	Positive	Open	N of Red Rock River
21	Little Basin Cr/ Sage	2012	Positive	Pregnant	N of Red Rock River
124	Little Basin Cr/ Sage	2012	Positive	Pregnant	SE of Sage Creek
202	Pioneers	2013	Negative		Christiansen Cr
203	Pioneers	2013	Negative		Mill Point
206	Pioneers	2013	Negative		Mill Point
213	Pioneers	2013	Negative		Clara Mine/ USFS
219	Pioneers	2013	Negative		McVey Creek
222	Pioneers	2013	Negative		Clara Mine/ USFS
223	Pioneers	2013	Negative		Fox Gulch/ USFS
225	Pioneers	2013	Negative		Mill Point
230	Pioneers	2013	Negative		Clara Mine/ USFS
234	Pioneers	2013	Negative		Clara Mine/ USFS
240	Pioneers	2013	Negative		Clara Mine/ USFS
241	Pioneers	2013	Negative		Goris Gulch/BLM
242	Pioneers	2013	Negative		Mill Point
245	Pioneers	2013	Negative		Taylor Creek
261	Pioneers	2013	Negative		Mill Point
262	Pioneers	2013	Negative		Taylor Creek
263	Pioneers	2013	Negative		Not Heard
266	Pioneers	2013	Negative		Clara Mine/ USFS
267	Pioneers	2013	Negative		Clara Mine/ USFS
269	Pioneers	2013	Negative		Mill Point
270	Pioneers	2013	Negative		Clara Mine/ USFS
275	Pioneers	2013	Negative		Clara Mine/ USFS
276	Pioneers	2013	Negative		Clara Mine/ USFS
278	Pioneers	2013	Negative		Mill Point
280	Pioneers	2013	Negative		Fox Gulch/ USFS
284	Pioneers	2013	Negative		Taylor Creek
288	Pioneers	2013	Negative		Taylor Creek
294	Pioneers	2013	Negative		Clara Mine/ USFS
295	Pioneers	2013	Negative		Christiansen Cr
298	Pioneers	2013	Negative		Christiansen Cr